

Section 11

Digital Deliverables

11.1 Electronic Files

The electronic files associated with the study have been organized according to the following compact discs (CDs). Each CD is located in Appendix A located in Volume II of the report.

- CD 1 - Drainage Structure Data and Photographs, Thalweg Survey, As-Built Data, and Stage/Storage Routing Information
- CD 2 - Photographs - Public Participation
- CD 3 - Photographs - Stream Reaches
- CD 4 - HEC-HMS/HEC-RAS Computer Models
- CD 5 - Study Report (Volume I) and Appendix Information (Volume II)
- CD 6 - GIS Shape Files as described in Section 11.2
- CD 7 - Floodplain Mapping PDF Plots (Index, Tiles 1-7)
- CD 8 - Floodplain Mapping PDF Plots (Index, Tiles 8-15)

11.2 GIS Shapefiles

The following provides a description of GIS data sets used during the study. The list is organized according to the folder structure within CD 6. Each folder on the CD contains an ArcGIS ArcMap version 8.3 document that references the data sets.

- Bioassessment - This data set includes the location of the bioassessment sampling points. The information was obtained by the project team during the water quality analysis.
- Bridges_Culverts - This data set includes identification number, type, size, length, flow capacity, top of road profile, general conditions, and invert elevation. The structure information was obtained by the project team from detailed surveys or from as-built data during the hydraulic analysis. Hydraulic analysis specific to the drainage structures is located within Appendix J, Drainage Structure Performance Tables.
- Detention_Ponds - This data set includes existing and future detention ponds that were included in the hydrologic evaluation. The hydrologic information includes the stage, storage, and discharge tables. The existing detention pond as-built information was used in the hydraulic analysis. The information was obtained from LPSNRD, the City of Lincoln, and Lancaster County.
- Floodplain_and_CrossSections - This data set includes the floodplain boundaries of the 100- and 500-year design storms as well as the channel cross sections for the 10-, 50-, 100-, and 500-year design storms, based on existing land use conditions. This information was obtained by the project team during the floodplain mapping effort.
- Floodway - This data set includes the floodway boundary based on a maximum 1-foot rise in the study 100-year floodplain. This information was obtained by the project team during the floodplain mapping effort.

- **Geomorphology_Information** - These data sets summarize field information gathered by the project team during field visits to analyze the geomorphic processes within the stream reaches. Data sets include channel bar type and condition, bed and bank material, type and bed consolidation, channel profile and cross section information, erosion and mass wasting, vegetative bank protection and condition of riparian corridor, outfalls, infrastructure crossings, location of stream reach photographs, HEC-RAS shear values throughout the watershed, location of knickpoints, debris jams, and fluvial process layers depicting meander adjustment, incising, widening, and stable channel.
- **Impacted_Buildings** - This data set includes the location of habitable buildings located within the study 100-year floodplain. The information was obtained by the project team.
- **Known_Problem_Areas** - These data sets identify the location of CIPs and other areas of concern that address issues due to bank erosion, incision, inadequate drainage structures, or structures in need of repair. The information was obtained by the project team during the CIP analysis.
- **Land_Use** - This data set includes digital land use data broken out into multiple categories for existing and future conditions. The future land use plan for the watershed is based on a 2025 planning horizon. The information was supplied by the City of Lincoln.
- **Livestock_Commercial_Industrial_GolfCourses** - These data sets include any land uses having implications for water quality and quantity. The information was obtained from the City of Lincoln.
- **Soil_Data** - This data set includes the Soil Survey Geographic (SSURGO) database data obtained from the Natural Resources Conservation Service (NRCS) for the Stevens Creek Watershed as well as Hydrologic Soil Groups (HSGs) by soil types determined from the NRCS Lancaster County Soil Survey.
- **Stream_Reaches** - This data set includes the numbering system for each major stream segment, upstream and downstream flow line elevation, reach length, and grade. The digitized stream reaches were obtained from the City of Lincoln. All attributes associated with the stream reaches were identified by the project team during the hydraulic analysis. General information including channel condition, type, and geometry were obtained during the geomorphic analysis and included in Appendix I, Reach Descriptions.
- **Time_of_Concentration** - This data set includes flow paths and associated variables used to calculate time of concentration values for each watershed subbasin. The information was developed by the project team during the hydrologic analysis.
- **Watershed_Planning_Map** - Multiple data sets including the potential East Beltway and buffer locations, potential future wastewater trunk sewer, grasslands, heritage greenway, LPSNRD established and proposed easements, native prairies, potential new road between Holdrege to A Street, open space, opportunity areas, existing and future neighborhood parks, private golf courses, existing and future trails, threatened and endangered species, wetlands, cultural and historic locations, and wastewater treatment plants.
- **Watershed_Subbasins** - This data set includes the identification number, drainage area size, composite curve number, and time of concentration calculations. The information was obtained by the project team during the hydrologic analysis.